

Application No. 09/941,151

Preliminary Amendment dated February 15, 2006

**Listing of Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-119 (canceled)

120.(currently amended) A method of providing a custom orthodontic appliance for repositioning teeth of a patient, the method comprising:

providing for display on a computer screen, with interaction by an operator, data of

images of the teeth of the patient in suggested post-treatment tooth positions and orientations that are based on three-dimensional information of the shapes of the teeth of the patient;

receiving feedback information on the suggested post-treatment positions and orientations from a person, other than the operator, who has interactively viewed a display of the provided images on the computer screen; and

providing a custom orthodontic appliance configured to reposition teeth of the patient based on the suggested tooth positions and orientations in accordance with the feedback information.

121.(previously presented) The method of claim 120 wherein:

the person viewing the display of the images is an orthodontic practitioner; and  
the feedback information includes information of approval by the orthodontic practitioner of the suggested post-treatment tooth positions and orientations toward which the teeth of the patient are to be moved by the appliance.

122.(previously presented) The method of claim 120 wherein:

the feedback information includes information of a change in position or orientation of at least one tooth from the suggested post-treatment tooth positions and orientations toward which the at least one tooth of the patient is to be moved by the appliance.

Application No. 09/941,151

Preliminary Amendment dated February 15, 2006

**123.(previously presented)** The method of claim **122** further comprising:  
providing revised images of the teeth of the patient for redisplay in revised post-treatment  
tooth positions and orientations based on the suggested tooth positions and  
orientations as changed in accordance with the feedback information.

**124.(currently amended)** A method of providing a custom orthodontic appliance  
configured to the individual anatomy of a patient for repositioning teeth of [a] the patient, the  
method comprising:

providing for display on a computer screen images of the teeth of the patient in suggested  
post-treatment tooth positions and orientations that are based on three-dimensional  
information of the shapes of the teeth of the patient;  
receiving feedback information on the suggested post-treatment positions and orientations  
from a person who has interactively viewed a display of the provided images on a  
computer screen wherein the feedback information includes ~~information selected~~  
~~from the group consisting essentially one or more of:~~  
information approving unchanged at least some tooth positions and  
orientations toward which the teeth of the patient are to be moved  
by the appliance, and  
information changing at least one tooth position or orientation toward  
which the teeth of the patient are to be moved by the appliance; and  
providing a custom orthodontic appliance configured to reposition teeth of the patient  
based on the suggested tooth positions and orientations in accordance with the  
feedback information.

**125.(previously presented)** The method of claim **124** further comprising:  
providing revised images of the teeth of the patient in revised post-treatment tooth  
positions and orientations based on the suggested tooth positions and orientations  
as changed in accordance with the feedback information.

Application No. 09/941,151

Preliminary Amendment dated February 15, 2006

126.(previously presented) The method of claim 125 further comprising:  
receiving from a person who has viewed a display of the provided revised images  
feedback information approving the revised tooth positions and orientations  
toward which the teeth of the patient are to be moved by the appliance.

127.(previously presented) The method of claim 124 further comprising:  
providing the person viewing the display with a capability to enter the feedback  
information.

128.(previously presented) The method of claim 124 wherein:  
the person viewing the display of the images is an orthodontic practitioner.

129.(new) A method of providing a custom orthodontic appliance, configured to  
the individual anatomy of a patient, for orthodontically repositioning teeth of the patient, the  
method comprising:

providing digital data of suggested post-treatment tooth positions and orientations of teeth  
of the patient that are based on three-dimensional information of the shapes of the  
teeth of the patient;

providing images of teeth of the patient from the digital data, for display on at least one  
computer screen to an orthodontic practitioner in the suggested post-treatment  
tooth positions and orientations for either approval for a custom orthodontic  
appliance for the patient or for revision;

receiving from an orthodontic practitioner, who has interactively viewed on a computer  
screen a display of the provided images, feedback information approving the  
suggested post-treatment positions and orientations; and

providing a custom orthodontic appliance configured to the individual anatomy of the  
patient to reposition teeth of the patient based on the suggested tooth positions and  
orientations approved in accordance with the feedback information.

Application No. 09/941,151

Preliminary Amendment dated February 15, 2006

**130.(new)** The method of claim 129 wherein the receiving of the feedback information approving the suggested post-treatment positions and orientations for a custom orthodontic appliance for the patient includes:

receiving from an orthodontic practitioner, who has interactively viewed on a computer screen a display of the provided images, feedback information of revisions to the suggested post-treatment positions and orientations;

providing further images of teeth of the patient based on the three dimensional information, for redisplay on the computer display device to an orthodontic practitioner, in suggested post-treatment tooth positions and orientations that have been changed in accordance with the feedback information of the revisions; and

receiving from an orthodontic practitioner, who has viewed a redisplay of the provided further images on a computer screen, the feedback information approving the suggested post-treatment positions and orientations, as changed in accordance with the feedback information of the revisions.

**131.(new)** The method of claim 130 wherein:

the providing of digital data of suggested post-treatment tooth positions and orientations of teeth of the patient that are based on three-dimensional information of the shapes of the teeth of the patient includes providing for display on a computer screen, with interaction by an operator, the digital data; and

the orthodontic practitioner who has interactively viewed on a computer screen a display of the provided images is a person other than the operator.

Application No. 09/941,151  
Preliminary Amendment dated February 15, 2006

**132.(new)** The method of claim **129** wherein:  
the receiving of feedback information from an orthodontic practitioner approving the suggested post-treatment positions and orientations includes receiving feedback information wherein the feedback information can include either information approving without change the suggested tooth positions and orientations toward which the teeth of the patient are to be moved by the appliance or information modifying at least one tooth position or orientation toward which the teeth of the patient are to be moved by the appliance.